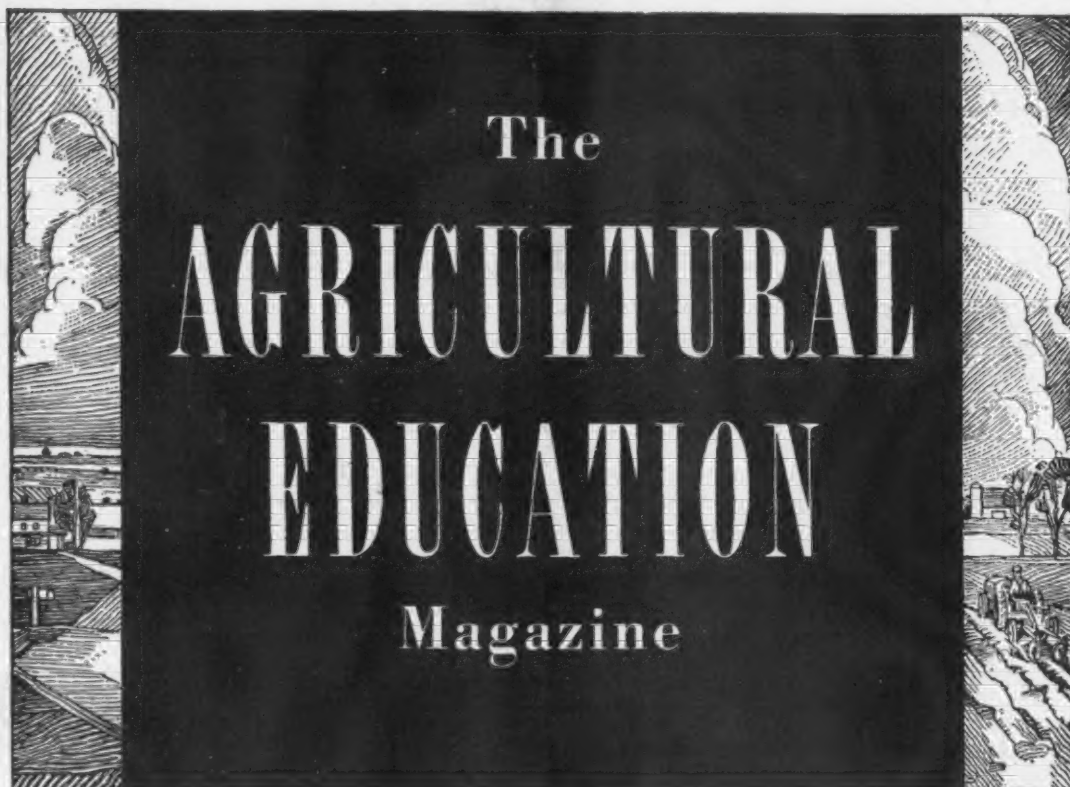




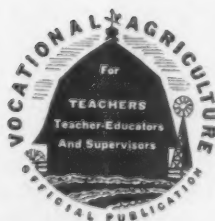
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“Do what you are hired to do and
then some. It's the and-then-some
that gets you your raise.”



The Agricultural Education Magazine

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Editorial Comment

Farm Boys and Military Training

VOCATIONAL leaders should give serious thought to the effect upon the young farmer of a probable law requiring a year of military training for all young men. This discussion does not intend to present opposition to compulsory military training in peacetime. Rather, it urges thought, study and planning before the adoption of legislation which is almost certain to follow this war.

It is quite easy for the lawmaker to glibly envision the young man of 18 to 23 as a sort of human plant without any roots, who can readily be shifted into some kind of military training establishment for a year or more and then back to civilian life, without much of a hitch.

That picture does not fit the young man who has successfully carried out practices in vocational agriculture. He will have an investment in farming of a few hundred to a few thousand dollars. He is likely to have a young herd of livestock or a flock of poultry which will rate in quality with the finest in his county. He may have land upon which he is making payments, crops maturing, and valuable machinery and equipment which cannot be left idle. All this can be sold, but at what price—socially as well as economically?

All right, then, says the legislator whose contacts are principally urban, the young farmer, knowing he must go thru military training, must not involve himself in such ownership until he has fulfilled his service obligations.

This situation, it seems to me, would be worse than tragic. What incentive would motivate the young farmer to make his stake in agriculture, as farming programs of Future Farmers have so strongly motivated so many thousands of our top notch young farmers in this nation?

The self-owned farming enterprise is the keystone of vocational agriculture. Even for the farm boy who does not study agriculture, early opportunity to actually own his pigs, calves, horses, and growing crops determines to a great extent the rapidity of progress and his depth of interest.

The young farmer who knows he must leave the land for a period of time will have a tendency either to conduct home enterprises which can easily be liquidated and which provide no particular incentive to come back to the occupation of farming at the end of the training period or not to enroll in vocational agriculture at all. This latter alternative would permit the young man to take more mathematics and similar courses given great weight in the selection of officer candidates.

The problem of keeping the best of rural intelligence on the farms is no mean postwar problem. Millions of farm boys who, prior to this war, expected to make farming their lifetime occupation will have been halfway or entirely around the world. How willing will they be to return to the quiet life and hard work of the rural community they left? Will this also be true of future millions who will go to military training establishments (if the legislation is passed)?

But one is struck most forcefully by the most serious problem of the removal of incentive to build and invest in agriculture. Everyone must thrill at the countless stories of young farmers who have run a two-calf "opener" into a \$5,000 dairy herd after five or six years. These things seem almost incredible; yet we have them, all around us, every day, in the flesh. I am afraid that the removal of this steadying influence is going to create a rural population more shifting than formerly—a population of cash croppers and tenants. It may delay the establishment of those determined young farmers to develop a long-time farming enterprise—not by the one year of compulsory training proposed—but five or six years. Why? Because the young farmer won't start until his investment can be permanent.

If this position may be construed as any lack of patriotism attention is called to the millions of farm youth who could have claimed exemption but scorned to do so. From what occupation did the "embattled farmers" come? Don't worry—a young man with his stake in these United States will fight for it when the need arises.

A thoro discussion of this problem and its implications is proposed. When we adopt a law requiring military training let's be certain that it is in the best interests of our nation as a whole.—George P. Couper, California.

Do We Accept the Challenge?

HOW long should this community maintain a teacher of vocational agriculture if nothing is being done in return by that teacher to raise the standards of rural living?

I remember well an incident of my first year in a training school. A trainee and I were making a few home calls. On the way home he asked, "How long has vocational agriculture been taught in this community?" When I answered, "About 15 years," he said, "Well, if this is all that vocational agriculture can do for the farmers of an area in 15 years, I don't believe I want to be a teacher of agriculture." Since other farm agencies had also been functioning there, his point was well taken.

What did this young man see that made him critical? There is no need to be specific. It is enough for us to remember that, in the last 35 years, the average butterfat produced per cow in the United States has only increased from 160 to 164 pounds, that the number of pigs saved per litter in many areas is about five, the percent of lambs saved per ewe and the eggs laid per hen are shamefully low, and, despite the continued improvement in seed varieties and hybrid corn, the yield of crops per acre is practically static.

These factors with others lead to farm homes where buildings are decaying without timber to replace them, fences are breaking, and soils are being depleted. The incomes are so low that the families must use the money needed to maintain buildings, fences, and soil, for living expenses. It not only does not provide for modern conveniences but often is inadequate for food and clothing.

As teachers of vocational agriculture are we just easing along with the current placidly accepting things as they are—as tho they must continue so to be?

We need only to read some of the many good articles in this magazine to know that some teachers of vocational agriculture are rowing with a firm, determined stroke. You undoubtedly know of many others who are making progress against the current. From their work may we grasp a vision, a conviction and a determination?

I know a teacher whose all-day students, thru their farming programs in two years, have increased by 57 pounds the average butterfat produced per cow per year for all the cows on the home farms of these students. Under another teacher the number of pigs saved per litter has been increased from 5.5 to 7.7 pigs in three years, the number of lambs saved per ewe has been increased by 50 percent in two years, the eggs produced per hen per year on the farms of these students have been increased 16 percent. Also these students earned an average of \$600 net profit last year from their productive projects—an amount equal to the average labor income per farm family in Michigan in 1940. They now have productively invested in farming and savings an average of \$1,030.

When we stop measuring student achievement by the number of pages in a text and start measuring in terms of the abilities learned and used in completing a farm job satisfactorily, then, and not until then, will all-day students bring about the changes mentioned.

But we cannot stop with this group. It would be like pulling with one oar. We must continue to build thru part-time and adult work. Part-time possibilities were very well described by Mr. L. R. Larson in the November issue where he bends over backward to make a point. His article merits careful reading.

If we make the most of our opportunities to serve rural America, we must pull with two oars—both young farmers and all-day programs. And if we raise a sail labeled Adult Education, we shall find the going much easier. A program, well-balanced, for all ages, and aimed toward community improvement, has been provided by the administrators of the national program in vocational agriculture. The challenge is before us. May we make the best of our opportunities.—Michigan.



T. H. Karney

Supervision

LANO BARRON

A New Department

—A New Editor

I AM happy to introduce to our readers our new department of "Supervision," and our new special editor, Mr. Lano Barron, Texas' good state supervisor located at Austin.

If you heard my report before the Agricultural Education Section at Philadelphia or if you read my editorial in the March issue, you are aware of the serious situation with reference to support, or rather lack of support, of the magazine by articles from our supervisors. This new department will, I am sure, remedy this weakness and give to our magazine new life and additional attractiveness. Mr. Barron has been a generous provider of articles to the magazine and is entering upon his new assignment with enthusiasm and earnestness. I am happy about the new department.

Mr. Barron was farm-reared in Arkansas and Oklahoma; a student of vocational agriculture in high school. He graduated from Oklahoma A. & M. with degrees B. S. and M. S., and has taken postgraduate work at Texas A. & M. For eight years he was a teacher of vocational agriculture in Texas and for three years an assistant state supervisor. Excellent qualifications, these. His first contribution to our new department is an interesting one from his "boss," Director Robert A. Manire.

Tho it may not be needed, I am taking the liberty of suggesting topics which it would seem to me might be discussed thru the columns of the magazine to the benefit of all our readers. What is a good supervisory visit? How do you use your executive committee? How do you plan your annual conference? What is good project accounting? What use do you make of your summaries of project accounting? How do you maintain relationships with your superintendents? How do you inform your new superintendents of schools maintaining departments of the many regulations and limitations pertaining to the operation of a department? What is your plan and procedure for staff meetings? These are a few. Others at least equally good, will occur to you. Address your contributions to Lano Barron, P. O. Drawer B. B., Capital Station, Austin 11, Texas.

Meet Editor Barron

Fellow Agricultural Workers:

I have agreed to be your special editor for the new "Supervision" section of the *Agricultural Education Magazine*. No, I don't have any more spare time than

(Continued on page 187)



Lano Barron

WARTIME is an appropriate time to begin a section on "Supervision." Supervisors are no different than other people. When war comes their work, their outlook, their methods are no less subject to change. It is in their power to develop co-operation and teamwork thru a harmonious and sympathetic supervision built upon great care in self-expression and tact in behavior.

The added responsibility of the supervisor in wartime is to make it possible for teachers to do the things which their natural constructive leanings and their increasing spirit of patriotism will urge them to do to make a greater contribution to the war effort.

At the present time there are 21 supervisors on the state staff for vocational agriculture, including Food Production War Training, in Texas. The friendly rivalry of this group of men is always amusing in any staff conference. In my opinion this feeling exists between supervisors everywhere to probably a greater degree than is true in any other group of workers in the field of vocational education in agriculture, a matter that I feel will interest teachers of vocational agriculture.

The reason for this is obvious. They are sold on their district. They are sold on their men being the best and doing the best job. They are sold on the progress their men are making. And, they are sold on the practices and policies they, themselves, carry out. In a large measure this is as it should be. However, from my combined experiences as a teacher of vocational agriculture, critic-teacher, teacher-superintendent, supervisor, and director, I would say that the one failing most common among supervisors is their lack of self-analysis. This is not peculiar to these men personally, but merely shows up more in their work than in other phases of the program in vocational agriculture. This is due to the influence their thinking has on the program as a whole.

Generally, it has been my experience that, if a supervisor is sold on adult work, then the teachers under his supervision will be strong in that phase of the program. If he is largely interested in Future Farmer work, then that is what most of his men will lean toward. If his personal ambition is to lead the state in the number of State and American Farmers, then he probably will. That is the human element in the supervision of our program, and is the main reason, according to my thinking, why supervisors need to



Rob't A. Manire

take time for self-analysis more than do others of us in the service of vocational agriculture.

That is why I think the establishment of this new section on "Supervision" is a definite step forward, and why we, as supervisors, should make ample use of this section. Where else can we measure our own programs with those of other sections? How else can we exchange ideas thruout the United States? It is my opinion that, if this section is properly supported, it will stimulate self-analysis of supervisors more than anything else. It will help us keep our eye on the ball, help get the job done.

I don't mean by this that I think contributions to these columns should be limited to supervisors. On the contrary, it seems to me that the best suggestions should come from the teachers of vocational agriculture who have their feet firmly on the ground, if they will speak their minds freely in their contributions. I believe they will in Texas. And I believe the supervisors in Texas have learned to listen.

Several years ago we started inviting one teacher of agriculture as a representative from each of the 10 areas in the state to our staff summer conference. Invariably, when the group became pretty well divided on some controversial issue, it was the voice of the majority of the teachers that settled our policy. Naturally these representatives have helped keep our whole program "heads-up," as experienced teachers of agriculture in the state preferred. In turn, the teachers have seemingly felt they were more a part of our program. We have been so pleased with the results that we decided to go a step further this past summer.

We invited a superintendent from each of the 10 areas to participate in our staff conference. In so doing we hoped to get their help in working out the general policies of our service for the state. We were sincere in this. We wanted their help, their viewpoint, and their thinking. Too, frankly, we were endeavoring to make the first constructive move to eliminate any possible feeling that the leaders of vocational agriculture in Texas handed their program already "cut and dried" to the superintendents of schools who were responsible for its administration.

To say the least, we had an interesting and lively conference. And, what's more, I am firmly convinced that it not only helped us to get the viewpoint of the superintendents, but they, while already full of praise for our work, were much more understanding of our problems after the conference.

From the beginning of the conference the work of the supervisor loomed more and more significant to me. Besides influencing the teachers and thru them the

(Continued on page 197)

The O.A.T.V.A. Program

RALPH E. BENDER, President

TEACHERS of vocational agriculture, like persons engaged in other professions, are organized for the purpose of promoting individual and group interests. Such organizations are based upon the theory that co-operative effort, involving the sharing of problems, ideas, and work, results in a more effective and attractive program. Probably much of the success of vocational education in agriculture can be attributed to the excellent working relationship that has existed within the group. There is ample evidence of pulling together.

It seems, however, that it is time to take inventory of where we are and whither we are tending. An extreme shortage of teachers coupled with the war demands has made a difficult situation that calls for a greater need of organized planning and effort. What are the state associations of vocational agriculture doing? How are they organized? What are their programs? How well are they functioning?

On the assumption that it is unfair to ask for information that you are unwilling to impart, some details of the program of the Ohio Association of Teachers of Vocational Agriculture are herewith presented. It is not claimed to be an ideal program, but rather it is a way that is working with some degree of satisfaction in Ohio.

Purposes of the Organization

The purposes of the Association, according to the Constitution, are:

I. To promote vocational education in agriculture.

II. To co-ordinate the work of the different departments of vocational agriculture.

III. To set up an advisory relationship with supervision and teacher education for the formulation of policies.

IV. To provide a means for promoting and conducting district activities.

Structure of the Association

The membership of the Association, which is composed of teachers of vocational agriculture, teacher-educators in agricultural education and supervisors of vocational agriculture, meets annually in a four-day conference. The conference, which is largely an in-service training program, is under the direction of the officers consisting of a president, a vice-president, and a secretary-treasurer, each of whom is elected for a one-year term. Responsibility for program planning is co-operatively assumed by the members of the Executive Committee and the teacher-education and supervisory staffs. The Executive Committee is composed of the officers of the Association and the chairman of each of the 17 districts in the state. This committee meets as often as is necessary (usually twice) thruout the

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The Program for 1944-45 follows:

Activity or Goal	Ways and Means
1. Have an adequate, well-planned program.	Committee appointed to serve as planning committee, propose a program, send copies to all of Executive Committee; discuss, revise, and adopt at Executive Committee meeting. Copy sent to each member of the Association.
2. Each district to plan and conduct a balanced program.	District Chairman to appoint planning committee, propose a program, discuss and adopt it as a District, send copy to State Secretary by December 1. When all are turned in he will mimeograph copies including all district programs to be sent to each district chairman. (Suggest that this be done by September 1 in succeeding years.)
3. All teachers of vocational agriculture to be organized in county groups.	Chairman of the District to appoint a teacher in each county not already organized to call an organizational and planning meeting. Name of chairman in each county to be sent to the Secretary.
4. Revise the constitution of the Association.	Committee appointed by the President to make revisions to be presented to the Executive Committee and approved by them before being presented at conference.
5. Sponsor an annual four-day summer conference.	Program arranged by Executive Committee; ask for a 100 percent attendance and check on attendance.
6. Send President and Secretary to A.V.A. Convention.	Pay expenses from funds in treasury.
7. Organize and conduct a teacher-recruitment program.	Ask teacher-education staff to prepare a statement concerning present teacher supply-and-demand situation, also a brief statement concerning the factors of competency in teaching to be sent to all teachers; ask them to use it in their classes. Also, keep contact with former teachers and prospective teachers in the Service.
8. Develop a better understanding of the purpose and function of vocational education among general educators and rural organizations.	Invite them to attend and participate in some of the district conferences. Ask supervisor to spend more time with the principals and superintendents to discuss purposes and problems.
9. Have a 100 percent membership on the part of vocational agriculture in the O.V.A. and A.V.A.	Collect dues for all organizations at the Annual Conference. Bring reports from those organizations to the teachers of vocational agriculture.
10. Arrive at a decision on the issue of separate travel pay for teachers of vocational agriculture.	A thoro discussion to be conducted in each of the districts to get the reaction or vote of the teachers. To be reported to Executive Committee who will make a recommendation to the supervisory staff.
11. Prepare and distribute a handbook on Vocational Agriculture in Ohio.	Recommend that a committee be appointed by the supervisor to work with the supervisory and teacher-training staffs—if assistance is needed.
12. Develop and conduct a program of publicity for the promotion of vocational agriculture.	Recommend that an assistant supervisor or teacher-trainer be assigned to prepare news releases, film strips, exhibits, radio programs, etc. Legislative campaigns to be directed by supervisor; suggestions sent to teachers on what to do and how to do it.
13. Prepare and distribute teaching materials.	Prepared by a committee of teachers in co-operation with the teacher-education staff.
14. Make plans and recommendations for participation of vocational agriculture in State Fair program.	Committee appointed to make a report of plans to Executive Committee; discuss the report and make recommendations to the supervisor.
15. Make plans for state contests in vocational agriculture for postwar period.	Committee to make a study, report to Executive group who will make recommendations to the supervisor.
16. Have 100 percent of F.F.A. Chapters pay camp contribution.	Each district to try to reach goal. Chairman of district to be given facts concerning record in the district. Junior members of Ohio F.F.A. Camp Inc., to meet at district teachers' meetings.

Methods of Teaching

G. P. DEYOE

A Fourth Dimension in Work Simplification in Vocational Agriculture

W. HOWARD MARTIN, Teacher-Trainer, Burlington, Vermont*

FARM production has been increased considerably since America's entry into the war, and this has been done with fewer skilled workers. The more general use of unskilled help and longer hours for an already hard-working people have been important factors on the farm front. However, this situation has given impetus to the idea of doing all jobs in a simple and easy manner consistent with the maintenance of adequate standards of quality of performance. Farmers have sought and found ways to cut corners on many jobs. Some agricultural experiment stations have given considerable attention to the study of work simplification. Instruction in vocational agriculture primarily has been in terms of three elements, (1) the soil and the crops and livestock produced thereon, (2) the facilities of farming and farm living—buildings, tools and equipment, and (3) capital and credit. In only a few instances, and then to a limited extent, has "the fourth dimension," time, been recognized.

On the basis of need and with a limited amount of research available as basic teaching material, Vermont teachers of vocational agriculture recognized that this problem constituted an opportunity to add a vital new element to their teaching.

Job Analysis Is Basic

The use of job analysis for the purpose of organizing content systematically has been an instrument in the kits of most teachers of vocational agriculture, but for some reason or other, it has not proved to be a creative instrument. Yet this type of analysis is basic to any simplification of farm work. An analysis is needed, not in terms of the old practices of doing a job, but in terms of scientific stop-watch precision—an analysis which will insure, especially for all common jobs, that every motion and each second will be utilized to advantage.

Here was opportunity! Such an analysis was completed in Vermont by Dr. R. M. Carter of the Agricultural Experiment Station. It has been published as Experiment Station Bulletin Number 503, "Labor Saving Thru Farm Job



W. Howard Martin

Analysis," and has been made into a movie, "Making Minutes Count." Seldom before have the findings from a single study been so widely disseminated and so widely accepted. Vermont teachers have practically without exception made extensive application in the teaching of youth and adults and this article is directed to a review of their teaching of work simplification in the all-day classes.

The organization of content and selection of method of presentation have followed no set pattern. This was to be expected because of variation in purposes, opportunities, abilities, and other factors. The Experiment Station study has, of course, tended to establish general outlines of content. Most work reported by teachers has been related to the dairy enterprise—primarily those jobs found in the twice-a-day chores where saving minutes and steps in a single job becomes of considerable significance when translated into annual savings of time and energy. Three rather distinct ways of achieving objectives of work simplification were utilized by teachers, namely, changes in technical practices, the use of farm mechanics, and improved planning or management.

Changes in Technical Practices

"Fast machine milking," represented the only major change of technical practice. This has been reported as a teaching unit by several teachers. In general, the methods of presenting this particular unit may be outlined as follows:

Preparation:

1. Compute time saved per year by reducing milking time from seven or eight minutes per cow to three, four, or five minutes for the home dairy.

2. Point out relation to control of udder diseases, especially mastitis.

Presentation:

1. Have students check milking time at home. (Use watch and provide spring scales for suspending milker pail.)

2. Review literature.

3. Show movie of Clark farm, "Making Minutes Count."

4. List steps in fast milking procedure. (Varying amounts of interpretive science included.)

Supervision and follow-up:

1. Have students check on milking time and report progress.

2. Teacher visitations and checking.

This method is open to criticism on the ground that there was so little opportunity for pupils to develop proficiency under the supervision of the teacher. Nevertheless, good results have been reported. The secret to success in using a procedure of this type was found in individual supervision and follow-up at

milking time. Not all teachers were willing to undertake this extra work and, hence, should not have attempted to utilize that particular procedure in teaching the job of fast milking or other operative jobs where it is difficult to develop "doing ability" as a part of class instruction.

Work Simplification Thru Farm Mechanics

Closely related to the job of fast milking, but falling in the area of farm mechanics, is milking-machine adjustment. The milking-machine check sheet has been used to good effect as a means of discovering problems and insuring order and system for the farm visits required. The check sheet serves as a teaching device since it places emphasis on improved practices, and, at the same time, is an aid to students in following thru with the unit on their home farm.

Milking-Machine "Check Sheet"

- A—1. How often does your milker instruction book tell you to flush out your vacuum lines? Every
2. When you flush the line, do you
 - a. Draw at least 2 gallons of boiling lye or washing soda solution thru each end?
 - b. Draw a second pailful of clean, hot water thru to rinse lines from each end?
 - c. Empty, clean, and dry out your sanitary trap?
- B—1. According to your instruction book, your compressor should operate at inches vacuum. At present the machine operates inches at gauge. This is (fast), (slow), (right).
2. At stall cock farthest from pump, there is inches vacuum.
3. At teat cup there is inches vacuum.
4. There is (no) apparent interference in vacuum lines.
- C—1. This machine should operate at pulsations per minute.
2. This machine is now operating at pulsations per minute.
3. Pulsation speed does (not) need adjustment.
- D—1. There is (frequently), (occasionally), (never) trouble with operation of pulsator.
2. Most common pulsator difficulty is:
- E—1. Some new inflations were installed.
2. Two sets of inflations (are), (are not) always on hand.
3. Inflations are changed (weekly), (daily), (irregularly).
4. Idle inflations are kept: a. Soaking in lye solution, b. dry.
- F—1. A count of inflations on hand shows:

. in good condition, but used some time.

. new and unused.

. checked, but not leaky.

. stretched, but not leaky.

. leaky.
- G—1. A solution rack is (not) used.

*The author is indebted to the following for assistance and co-operation in the preparation of this article: Oren Burbank, Woodstock; Cola Watson, Highgate; Wilfred Leslie, Orleans; Lyle Frazier, Newburg; and George Webster, Randolph Center.

2. This rack has (not) a spigot for filling teat cups directly.
 3. New solution is prepared (daily), (occasionally), (every..... days).
- H—1. To make the pump operate properly, the following parts or repairs are needed:.....
2. Are any stall cocks bent or broken?
 3. Are rubber inflations needed?
 4. Is rubber gasket needed for sanitary trap?.....
 5. Is long milk tube, from teat cluster to pail, in good condition?.....
 6. Are short air hoses all in satisfactory condition?.....
 7. Have any of the teat-cup shells been cracked or broken, so that they could leak air when compressor is working?.....
 8. Are you sure that the hose from stall cock to milker pail is absolutely clear and open?..... Have you checked it?.....
 9. Is the cover gasket between the milk pail and cover in good condition, tight, and completely sealing pail?
 10. Have you been meaning to install more stall cocks in important locations, to permit greater use of milker, or to save walking at time milker is rinsed?..... If so, why not do it?.....
 11. Do you know of other things about milker or pump which need care or attention?.....

The problem of reducing labor has also been approached from the standpoint of constructing laborsaving equipment. Emphasis is first placed on studying the needs for equipment. This would include trying out, when possible, different types of equipment, and estimating savings in labor, as well as designing equipment for individual situations. One project that has been undertaken in several schools was the construction of a two-wheel manure cart to replace the old wheelbarrow. It carries about twice the load, has better balance, and is more easily pushed and dumped.

Improved Management

Perhaps the greatest opportunity to deal effectively with the problem of laborsaving has been found in the general field of farm management or dairy herd management.

An approach to the problem of efficiency favored by Vermont teachers was the unit on planning or replanning the dairy barn. This procedure represented the introduction of a new factor, or new emphasis to an old factor, to a teaching unit which had been included in courses of study for many years. One procedure reported may serve to characterize this general approach.

A member of the evening school class requested members of the class in vocational agriculture study his barn layout and make recommendations for efficient rearrangement. The problem was presented and the class reviewed (160 minutes) the major factors which would enter into the replanning. Plans were made for the farm visit and the class was divided into groups for purposes of securing data including measuring and sketching the layout of barns and collecting information on chore routine. The entire class spent a half day at the farm, collecting information, but two revisits by the teacher were required to secure additional data needed as the class developed the problem. The class devoted about

one week of additional study to the problem before final plans for barn arrangement were completed.

Changes in stable floor plan of Carl Fuller's barn:

1. Cut out a door 4' wide by 7' high in cement wall at end of feed alley in front of silo. (There is now a door 4½' off floor and 2¾' x 3½' in size.)
2. Bevel cement at both ends of feed alley. (There is now a 2" shoulder.)
3. Build a silage cart and a grain cart.
4. Eliminate motor room and hang motor on wall in stable near entrance.
5. Build grain chutes to have outlets from storage above.
6. Relocate milkhous adjacent to end of entrance to cow stable.

Changes in second story or section over stable of Carl Fuller's barn:

1. Make grain storage boxes and chutes near stairs.
2. Make an additional hay chute to drop hay down to walk between cow stable and pens.
3. Make a drop door at lower end of barn and take hay up with hayfork from outside using a hay hoist. (Put in hayfork.)

Present capacity of barn hayloft is 58 tons filled to eaves, about 15 tons can be added with considerable extra labor.

New Plan: Capacity 64 tons to eaves and 35 tons can be added easily with hayfork.

It is, of course, impossible to state that the principles and practices of work simplification could be more effectively taught if presented in simplified teaching units. Nevertheless, it is believed that such is the case. Clearly such units as (1) handling milk and milk utensils, (2) reducing barn labor, (3) selecting better barn equipment, (4) planning barn chores, (5) "positioning" animals, (6) "positioning" equipment, and (7) providing storage for bedding and supplies, have an intimate association with the job of planning the rearrangement of a barn. If the primary objective of the teacher is to teach work simplification, it would appear that attention should be focused on units of this character. Definite outcomes, in terms of changed practices, could be established for each unit taught, similar to the following:

Possible Outcomes: (Teaching unit—handling milk and milk utensils)

1. More compact arrangement of dairy cows to save travel and time in milking.
2. Relocation of milkhouses or straining rooms.
3. Use of wheeled carts to make transfer of utensils from barn to house and back to milkhous with less effort and with reduced number of trips.
4. Washing utensils in milkhous.
5. Use of two strainers where savings indicated the need.
6. Reduction in mileage carrying milk, thru use of large, full pails.
7. Utilization of return trips to carry water, etc.
8. Better positioning of milker switch, hose, stools, etc.
9. Use of solution rack with solution cocks to fill milker tubes. (The ordinary solution rack holds teat cups, but hand filling with solution wastes time.)

In Summary

A number of approaches to the problem of work simplification have been used by Vermont teachers. One unit involving a change in technical practices,

namely, a faster machine milking, was widely taught. A second mode of attack was thru farm mechanics involving the design and construction of laborsaving equipment. A third approach widely used was planning barn rearrangement. Most cases reported by teachers represented merely the introduction of a new factor or point of emphasis to teaching units and methods long utilized. The teaching approaches may be summarized in a general way as follows:

1. Teachers have attempted to develop with students desirable attitudes toward work simplification.

2. Teachers have endeavored to integrate or relate the teaching of work simplification to teaching units of a specific enterprise, to farm mechanics, or to farm management.

In lieu of definite conclusions, the following questions are submitted for consideration by readers of this article:

1. Have we in teaching vocational agriculture neglected the seemingly simple, routine farm jobs on the assumption that boys were proficient—that there could be nothing new?

2. Have we in vocational agriculture made full and effective use of job analysis as a means of discovering teaching content or as a method of teaching?

3. Have we given sufficient emphasis to what may be considered a "fourth dimension" (i. e. *time* in relation to doing farm work) in the assets of a farmer, young or old?

Meet Editor Barron

(Continued from page 184)

you, but I believe we would be very foolish indeed to discontinue our professional organ. And what right have I to expect its continuance if I am not willing to contribute to its existence?

It is going to take concerted effort on our part to be capable of meeting the responsibilities that are ours in the next decade. We cannot, we must not, falter. Destiny forbid! But we must be realistic enough to recognize the fact that we are now—today—approaching the crossroads. After the light of peace once again envelopes the earth, we shall be able to see by the signs which road we have taken—after it is too late to turn back. So in this universal blackout, let us cling grudgingly to the safety light of service. Let us as individuals help keep a sound program of agricultural education functioning.

If you and I exchange ideas, then each of us has two. Let us put our ideas, our problems, our achievements before the entire service, and thereby step up our thinking many-fold. Only in this way can we hope to build a sound, functioning organization. Supervisors—and others—the pen is yours.—Lano Barron, Special Editor on "Supervision."

The Editor Suggests

Again I am asking for articles for the "Methods" page—articles from teachers; those who have tried out new ideas successfully, new ideas that have clicked, that have secured results, that have been well received by the boys and have added interest and understanding to the teaching program. These should be short and might be illustrated.

Farming Programs

C. L. ANGERER

Relating Instruction in Vocational Agriculture to Farming Programs

K. W. KILTZ, Teacher-Trainer, Purdue University, Lafayette, Indiana

THE skillful surgeon who alleviates the pain and danger from an inflamed appendix did not attain his skill without long hours of practice. The eloquent lawyer who sways the jury with the drip of words from a mobile tongue and an agile mind did not reach the pinnacle of oral persuasion without long practice. The farmer who is recognized as a man of skill and superior managerial ability enjoys this reputation because of long practice and experience. The boy who is enrolled in vocational agriculture must follow a similar trail if he is to reach the same heights. To gain farm skills and to be able to make correct decisions about farm problems, he must undergo a period of practice and experience. By participating in the directed experience, supervised farming, in the course in vocational agriculture he should be able to shorten the time that a superior farmer must use in becoming proficient.

A well-selected, properly organized and correctly utilized program of supervised farming provides the pupil with many opportunities for experience that cannot be provided for with hypothetical content. Because of this, much of the content in vocational agriculture that is ordinarily considered as course material should be derived from, or otherwise related to, supervised farming with the latter accepted by the teacher and the pupil as the major substance of vocational agriculture.

One of the first steps to be taken in developing this relation between the teaching content and the supervised farming activities of the boy is the development of some understanding by the parents about the purposes and composition of supervised farming and about their relation to it. Two of the more important procedures for doing this are the individual contacts between the teacher and the parents and the organized group meeting of parents that may be planned by the teacher.

Some of the individual contacts with the parents of a boy should be made before he enters the program of vocational agriculture. Visits at this time should have a guidance motive. The teacher, the parents and the boy should consider the latter's interests in and his aptitudes for farm life as well as his opportunity, if he should enroll in vocational agriculture, to gain directed experience in farming and the opportunity that he may have eventually to become



K. W. Kiltz

established in farming. Interests and opportunities in other vocations and professions may also be considered at this time. During these contacts the parents should be fully informed about supervised farming and should be made aware of their relation to it. During these and later visits, if the boy is to enroll in vocational agriculture, the teacher should assemble information about the farm so that he will be prepared to guide the boy in the organization of his farming program.

The group meeting of parents may be used to supplement the individual visits. The principal purposes of the group meeting would be to inform the parents more fully about supervised farming, their relation to it and its importance in the training program.

The boy should be methodically informed about supervised farming and a receptive attitude upon his part toward it should be developed. Some of this development of understanding and appreciation may be done during the visits before he enters the course. The more complete development of the concept of the boy about supervised farming should be made soon after school starts. The procedures might include the examination of type cases of suitable local programs of supervised farming, the study of programs of successful state and American farmers, discussions by older boys in the course who have had successful programs, and the co-operative planning in class of a suitable program for a selected situation.

When selecting his program the boy will determine his selection in part from the analyses and interpretations that he makes in connection with the farm under the guidance of the teacher and with the co-operation of his parents. However, several additional factors are pertinent. Among these factors are the boy's physical and mental ability and maturity, his previous experience and training, and his interests. When the boy is selecting his program, it is desirable that the teacher make a careful evaluation of the selection. At least seven important points should be considered in such an evaluation. These are—(1) The relation of the boy's farming program to the farm situation where he is to practice. (2) The size of the projects that are in the program. (3) The extent of the program. (4) The balance in the program. (5) The continuation features of the program. (6) The boy's ownership interest in the program, and (7) The suitability of the program for the physical, mental, informational and skills levels of the boy.

Each of these points will be discussed only briefly here. The first point involves the question of whether the boy's program includes major enterprises and im-

portant problem areas of the farm, or whether it weakly tickles at the margin of the business by including only a minor enterprise or some problem area that satisfies the boy's fancy or interest but that involves limited experience and learning.

The size of the projects should meet at least two conditions. In the first place, the projects should be large enough to involve representative jobs and problems in as great number as it is feasible to teach the boy in the time for which the organization is being made. In the second place, the size of the projects should be adapted to accurate and convenient record keeping.

In connection with the extent of the farming program, the teacher should consider the project possibilities of the farm, the boy's maturity and needs, and his own teaching methods. In general, the extent of the boy's program for a current period should be such as to provide him with a fairly continuous source of jobs and problems for his learning activities. Also, the extent of the program should permit as thoro study of the farm as is practicable during the boy's high-school training period.

Balance in the program is significant. The program should be so fashioned that it provides for a distribution of study and experience thruout the 12 months of the year. Balance also implies that crops, livestock and improvement projects and supplementary farm practices, affording an opportunity for a representative cross section of experiences on farms, are to be included in the program for a current period.

The continuation feature of the program is a fundamental point that the teacher should consider when helping the boy organize in successive years. Major enterprises of the farm should continue in the program for more than one year for at least two reasons; to provide the boy with an opportunity to obtain more complete training, and to permit improvement in achievement.

The sixth point is boy ownership. There should be some ownership interest in one or more phases of the program. The activities in which the boy has ownership interest will be more interesting and vivid to him and more likely to stimulate a serious effort on his part. Ownership interest is also essential to eventual establishment in farming.

Finally, the teacher should determine that it is adjusted to the physical and mental abilities of the boy and that it will serve as a source of information and skills not now possessed by the boy. The program should be achievable as well as challenging.

While the boy is selecting a suitable program of supervised farming that will meet with the evaluative criteria that have just been discussed, the teacher should also help him make the type of organization of the program that will assure the most effective learning. Two important steps in doing this are to guide the boy in setting up a business

understanding between himself and other parties involved in the program and to teach the boy to organize a plan of activities in connection with the program.

The purpose of the business agreement is to define clearly the boy's relationships and responsibilities in connection with labor, management and finance and to provide the boy with fundamental training in contractual relationships of the type that will confront him as an adult.

The purpose of the plan is to define clearly the jobs and problems in connection with the various parts of his program. The plan should guide the boy in his preparation for job operation and in his use of records. The act of planning carefully may also develop in the boy the habit of clearly defining objectives and of preplanning as well as the ability to do so.

With the foregoing bases established, the further progress of the boy is a challenge to the teacher's methods of instruction. The challenge will be to the teacher's ability to interweave content and procedures with the supervised farming activities of each boy in the class. The objectives for such a teaching process may be stated as follows—(1) To lead the boy to recognize jobs that need to be done and problems that need to be solved. (2) To train the boy to analyze these jobs and problems with his specific situation in mind. (3) To teach the boy to obtain and understand information and to develop skills for these specific jobs and problems. (4) To train the boy to make a selective evaluation of information to determine that which applies to his situation. (5) To guide the boy in successful job operation. (6) To train the boy to evaluate his performance and to plan for desirable adjustments in his future performance on the same type of job. When the boy has progressed thru this process he will have had an opportunity for a definite relationship between his class activities and his farming activities.

When using this type of instruction the teacher will probably find that a supervised farming notebook in the hands of each boy will be very helpful. The notebook can be so organized and its use so directed that the boy can use it in making his definite development, thus providing for the elaboration of the process as defined by the six objectives that have just been outlined. In making this detailed development the pupil should utilize his parents and should be carefully guided by the teacher. The various jobs and problems should be considered as nearly in seasonal sequence as possible. Jobs and problems that are common to the class or to a portion of the class may be considered by the class as a whole or by the segment of the class that is affected. Some jobs and problems will be peculiar to one farming program and will have to be handled entirely thru individualized instruction. Even with problems that are common to a group, some individualized instruction will be desirable to consider the specificities of a given situation and to check and deliberate with each boy on his development for his particular program.

One of the final responsibilities in the procedure for relating instruction to supervised farming is to grade each boy on his development with considerable emphasis upon the operative aspect of his activities.

More About Blueprints

I. V. DOWNING, District Supervisor,
Ivor, Va.

YOUR editorial in the December issue of *Agricultural Education Magazine*, entitled "Blueprints Wanted," certainly "hit the nail on the head." Our program in agricultural education has drifted, year by year, from the purposes for which established, which was (and is?) the "Training of Prospective and Present Farmers for Proficiency in Farming." We have gone out on all kinds of tangents hoping to "strike gold," when we already have as our responsibility the training of young and adult farmers to become efficient farm producers and managers, a really big job. Instead of sticking to our job of TEACHING—that is, strengthening man's ability to solve his problems and master his environment—we have tended to become a community jack-of-all-trades centering our activities more and more on improving man's environment, under the assumption that our system of free enterprise wasn't functioning successfully.

Not only have we attempted to take over the job of the community feed dealer, the community merchant, the community fertilizer salesman, the community hatchery, the local repair shop, and many like activities ordinarily performed by citizens in the community, but we take on the work of other teachers in the school. If music isn't being taught properly in the school, we take on the job of teaching music. If no one seems inclined to lead the 4-H Club or the Boy Scout Troop, we take on these jobs. If there is no one to teach shop to grade students, we answer that call. If the science teacher isn't teaching science based on community needs, we take on the job of teaching practical science. If the home economics teacher isn't making sufficient progress with the teaching of food preservation, we take on the job of canning vegetables. And so on, *ad infinitum*.

New Fields Opened

Many new fields of community service have just been opened up by the Food Production War Training program. Our leaders in the community service field will have a field day when they get the local teacher of agriculture lined up with the responsibility for looking after the following:

The community cannery, the community repair shop, the community hatchery, the community frozen-food lockers, the community poultry-dressing plant, the community feed-grinding plant, the community feed-mixing plant, the community sawmill, the community planer for dressing rough lumber, the community fertilizer-mixing plant, the community abattoir, the community meat-curing and cooling plant, the community smokehouse, the community

While the bulk of the teaching in vocational agriculture should be related to supervised farming in some such manner as discussed in this article, there will be some content that the teacher will recognize as having considerable value but that is not found in supervised farming. That some content of this type exists and needs to be taught is conceded.

storage plant, the community seed-cleaning plant, the community agricultural fair, the community egg-grading station. And who knows but that, perhaps if the home economics teacher doesn't do the right kind of a job teaching the making of dresses and the baking of pies and cakes, we will put in a community sewing center and a community bakery.

Two farmers lived on adjoining farms. Farmer No. 1, after a study of his farm and what would give best results over a period of years, made a blueprint of his farming plans, which included the few enterprises best adapted to his farm with the best rotation of crops, and so on. This plan he followed thru the years, making improvements here and there, devoting his main attention to ways and means of producing his crops and livestock more efficiently. Farmer No. 2, not only produced the same enterprises grown by Farmer No. 1, but he tried out many additional enterprises. He heard of a farmer up the county making money on hogs so he plunged into hog raising. This enterprise showed promise for a year or so, but not as well as he expected. Then he changed to poultry, and for the same reason he changed to sweet potatoes, and then to other enterprises, always looking for that "pot of gold," not being content to make progress slowly and do a good job on the few enterprises best adapted to his farm and its location.

Are we in agricultural education going to follow the example of Farmer No. 1, make a blueprint of our job and follow it thru the years even when the temptation to branch off is great; or are we going to be like Farmer No. 2, keep on trying to do the spectacular and wind up on the little end of nothing, with nothing more to show in the community where there is a teacher of agriculture than in a community without one?

What more spectacular statements could be made about the effectiveness of a department of vocational agriculture than these?

In this community 75 farmers now farming, with five additional ones each year, graduated from the all-day and part-time classes of local high school. The majority of these are outstanding.

The average corn yield per acre, over a 10-year period, increased from 35 to 49 bushels.

The Ohio Program

(Continued from page 185)

year to keep the program functioning. Each district chairman is elected for two years, with the odd-numbered districts having an election in odd years and the even-numbered districts electing in even years. This feature provides for an experienced Executive Committee on the part of about 50 percent of the members.

The Association is financed thru the payment of annual dues amounting to \$3 per member. This fee gives each person a membership in the American Vocational Association and the Ohio Vocational Association, as well as a subscription to our *Agricultural Education Magazine*.

Each district in the state has the opportunity to determine and conduct its own program. For the most part these programs are centered around the interests, needs, and problems of the teachers. Many of the suggestions for these meetings come from the State Executive Committee and the supervisory staff.

WATSON ARMSTRONG

Farmer Classes

W. H. MARTIN

Young Farmer Training in Wartime

PAUL W. KIDWELL, Teacher, Lamar, Missouri

AMONG the leaders of the home-front fighters are those young farmers who are left to carry on the farm business and produce the food which is so essential in wartime. During this period these young farmers are face to face with more vital problems that require careful decisions than are found during normal times. During the present crisis the teacher of vocational agriculture may make one of two decisions: (1) drop the young farmer work because so many of the young men are in the Service, or (2) recognize the fact that they need guidance and training more now than they have probably ever needed it before. Believing the latter decision to be true, young farmer work has been continued in the Lamar community.

During the past six years, with the exception of 1943 when the young men were enrolled in the various War Training classes, young farmer classes have been sponsored by the Lamar department of vocational agriculture. In 1941 20 young men, under the guidance of the teacher of vocational agriculture, sponsored an organization of young farm men and women known as the Barton County Rural Youth Organization. The result of that effort has been that these young people still come together once each month for educational and recreational meetings. This organization now has a membership of 45 in spite of the fact that so many young people have left the community.

Organizing Classes

The best means found of interesting young farmers in furthering their training was by individual contact, which was made by both the teacher and key members of the class. Former F.F.A. members and students of vocational agriculture formed a nucleus around which the class was built. Thru their efforts many boys were contacted who were new in the community, who had attended other schools, or who had not completed high school. Sixty percent of the present class are former students of vocational agriculture. Classes were held on Wednesday night of each week from 8 to 10:30 o'clock.

That young farmers are deeply interested in the problems facing them today is evidenced by the fact that it was difficult to close the discussion without running overtime. During this war period discussions were centered on immediate problems of increased and efficient pro-



P. W. Kidwell

duction rather than on more general problems. Following are a few of the typical problems that were brought up:

1. How can I adjust my farming program to meet war needs?
2. How can I adjust my feeding to meet the protein shortage?
3. How can I increase crop yields?
4. How can I get the most production out of my farm and still conserve the soil?
5. How can I stop leaks of high-priced feeds?

6. Is this a good time to buy a farm? Each problem was discussed after definite information concerning each member's farm was secured. For example, before a discussion on soil conservation was started, information was obtained from each member as follows:

- Name _____ Size of Farm _____
- Farming Data:
1. Acres in cultivation
 2. Acres of farm terraced
 3. Are majority of fields (a) level, (b) sloping, or (c) rough
 4. Average size of fields in cultivation
 5. Estimated extent of erosion on farm
 6. Approximate number of bad washes on farm
 7. Acres limed since 1940
 8. Acres of green manure turned under last year
 9. Total acres of legumes grown last year
 10. Acres of crops fertilized last year

Following the discussion of soil conservation which was based on the data obtained, each member was given a form to fill out showing the practices to be followed on his farm to conserve soil and at the same time increase crop yields.

Young farmer members took part in co-operative activities with the all-day F.F.A. members. Particularly were they interested in activities which pertained to their farming programs. During the year 9,000 pounds of protein supplement and 4,000 pounds of mineral were mixed co-operatively. Formalin was bought in quantity and enough distributed to treat 2,500 bushels of seed oats.

Recreation

Approximately one hour of each evening meeting was devoted to recreation. Of chief interest during the recreation hour were basketball, volleyball, and boxing. One evening each month the group was pitted against the regular F.F.A. teams. At the R.Y.O. meetings when a mixed group was present, recreation consisted of folk dances, round dancing and the usual party games.

At a time when teachers of vocational agriculture have so many jobs to do, they are likely to find themselves wonder-

Classes for Veterans

L. D. CLEMENTS, Supervisor, Neb.

VETERANS of this war are beginning to return to their homes. They will continue to dribble back in steadily increasing numbers for a long time. In Nebraska a large percentage are farm boys—many of them former students of vocational agriculture, former members of the F.F.A.

After the war there will be a considerable period of rather difficult readjustment for these young farmers. Many of them went to war as boys but will return as men, ready to settle down and become established in a farming business of their own. They will need a friend. The teacher of vocational agriculture naturally is the most logical friend and consultant and probably the first to whom veterans will turn. Sympathetic, understanding, tactful, informed on present conditions, and with close friendship, and an acquaintance with the boys' problems, the teacher of agriculture should be a real friend in need. Every teacher will have this opportunity and should make the best of it. Let's be ready.

1. Correspond with all former students and young farmers before they return. Let them know of your interest in their welfare. Offer your assistance in helping them to become established in farming. Ask them to call to see you when they return.

2. Call at their homes for a friendly visit.

3. Know the answers: (a) farms available in the community, (b) sources of credit, (c) financial assistance available, (d) opportunities and benefits of Federal bills, (e) enterprises most promising for profit, (f) personal problems of a confidential nature, (g) new methods and practices to recommend.

4. Work with your county veterans service committee.

5. Know the G.I. Bill of Rights and its provisions.

While definite plans of administration have not been announced, it is possible that part-time courses in agriculture with farming programs on the home farm may qualify a student for further benefits in the process of becoming established in farming. Keep yourself informed and be ready to inform eligible young farmers who may come to you for counsel, assistance and advice.

ing if the time and effort spent in conducting young farmer classes is worthwhile. Any teacher who has spent much time working with young farmer groups will readily answer that question in the affirmative. Even tho a young man studied vocational agriculture for four years while in high school, the time that he needs encouragement and help most is when he has actually "set his toes" and is transferring into a full-fledged farmer.

Wanted—A Thousand Meetings of Young Farmers and Homemakers



AN AREA for the expansion of our program in agricultural education is the recognition on the part of teachers of agriculture and of homemaking, in those schools in which both vocational departments are maintained, of the needs of these rural young people for joint meetings to discuss problems of importance in the field of vocational, social, civic, and recreational living. The report of Dr. John B. McClelland and Dr. Mary Lyle of Iowa State College, presented at the joint session of homemaking and agricultural education at Philadelphia, was disappointing in the small number of departments found in which something was being done in this type of personal service, but it was most heartening in the interest aroused and the possibility of service which was impressed upon those in attendance. An outstanding example of this type of service is found in the Canal Winchester, Ohio, community — Mrs. Louise Wolfram, teacher of home economics, and Ralph E. Bender, teacher of vocational agriculture. The superintendent is A. B. Weiser, a loyal supporter of vocational education. These young people hold a joint session monthly about nine months of the year. They have their regular officers separate from the Young Farmers' Association

and the young ladies' short course. Neal Schirm, a graduate of the agricultural department, an American Farmer, and a successful prospective dairyman, is the president this year.

At the January meeting of the joint organization (they call it their Community Club) the problem for discussion was "Shall young couples marry previous to military service?" The attendance included two married young couples, two wives whose husbands are in the service, and some 55 others, nearly equally divided between young men and young ladies. All the student teachers were present. The discussion was led by the assistant teacher of home economics, Mrs. Ruth Knowlton. After a discussion period the young people adjourned to the gymnasium for a period of recreation in which it was required that different young people direct the group games for just that educational experience. Refreshments and square dancing followed.

Need it be mentioned that No. 62 in attendance was that little arrow marksman, Cupid?

Wanted—A thousand such organizations scattered over all the states in which young men and young ladies are found in the same community. Will you help? Why not make it 5,000?



The first Young Farmers Association in Ohio was organized in Franklin County in 1921. So helpful was the organization and so successful that by 1939 the number had increased to 193, located in over half of the departments.

The important purposes of the organization have included the improving of farm practices, the improving of recreational and social life, providing training for leadership, and assisting young men to become established in farming.

Young Farmers Study Farm Purchase Problems

Mr. C. M. Wade, farm loan specialist, from the Federal Land Bank of Louisville, Kentucky, was the guest speaker at a county-wide meeting of young farmers held in Columbus, Ohio, on January 10. The meeting, planned and sponsored by the Franklin County teachers of vocational agriculture and the county agent, Mr. J. E. Whonsetler, was held for the purpose of developing an understanding of the many problems involved in the purchasing of land at present prices. About 30 young farmers were present in addition to those sponsoring the meeting, the County AAA chairman, and the county representative of the Federal Land Bank. Most of the young farmers present were tenants or farming in some form or another on a partnership basis; a few were ready to purchase land. Those present at the meeting expect to carry the facts and suggestions of this meeting to their own local groups.

"Be conservative and cautious in buying a farm at present prices" seemed to be the general advice given by Mr. Wade. He made the statement that any time may be a good time to buy a farm if the price is right. However, he emphasized the important fact that land has advanced in price from 50 to 100 percent during the last few years and that present farm prices are not likely to continue until the land can be paid for. He said that a simple way to estimate the value of land was to multiply the gross income from the farm for a year by $5\frac{1}{2}$. In such a procedure it is very important to use average prices and yields. This point was forcibly made when a typical 160-acre Franklin County farm was used for example. For this farm, corn was estimated at 50 bushels per acre at 60 cents, wheat at 18 bushels at 85 cents, and soys at 20 bushels at 80 cents. Prices for the 1935-39 period are fair to use. On such a basis this farm was worth about \$16,000. Any value above this would be a premium in which more risk is involved. Another important point made by Mr. Wade was that good land hasn't advanced as much as poor land and good land can usually be purchased more cheaply than it can be built.

Do you like to farm? Does your wife want a farm? Where do you want to live? What size and type of farm business do you want? These questions are as important as ever before and should be carefully considered. Investing in a farm is a long-time project.

The returning veterans will have enough grief and disappointment without being placed heavily in debt on a farm too high in price. Mr. Wade thought that very few of our returning boys should invest in land. Their money placed in good livestock and equipment and put to work as a tenant on a good farm seems to be a more desirable way to proceed.

The meeting was excellent. We need more of this type of county meetings.

Two state conferences were held just prior to the war with over 150 delegates attending, from the different associations. These conferences proved to be a great inspiration to those attending and to the work in the home associations. No action for a permanent state organization has been taken.

Farm Mechanics

R. W. CLINE

Farm Machinery—Build It Today—Buy It Tomorrow—Repair It Always

MARK NICHOLS, State Supervisor, Salt Lake City, Utah

IRON and steel went to war in the form of tanks, ships, jeeps and a hundred and one other pieces of combat paraphernalia. Little was left for the construction of farm machinery, and soon the American farmer started to scratch his thinker and ask himself what he could do about it. On the whole, there were enough repair parts to be had, but who would do the repairing? The old-time village blacksmiths were about extinct. The mechanics in rural communities went to urban centers in quest of higher wages. Indeed, rural areas as far as mechanics were concerned, became as Old Mother Hubbard's cupboard—very bare.

For a quarter of a century, vocational agriculture had been making an educational contribution to farming. Some high-school curriculums in vocational agriculture contained as much as half time for farm mechanics; most of them were set up for a fourth or a third of the time while some had no farm mechanics provisions at all. Some attention had been devoted to skills in the repair of farm machinery, but in altogether too many cases this had not been given the emphasis it deserved. A comparatively small number of farm machinery classes for adult farmers had been given in most states. As a whole, American farmers were none too well prepared by training to meet the problems of repairing their own machinery.

The situation in 1942 made "doing your own" a necessity, however, and "learning readiness" was automatically set up for the Rural War Production Training program. Course 5 immediately became very popular everywhere. There was a need for this type of instruction and vocational agriculture began meeting the need. Hundreds of thousands of American farmers received training in the care, repair, and operation of farm machinery. The machinery shortage became more desperate in 1943.

Farmers Build Their Own Machinery As Well As Repair It

Necessity has always been the mother of invention and American farmers started to make their own machinery and equipment. The difficult farm labor situation accelerated this effort. Hay loaders, manure loaders, beet loaders, and many other laborsaving devices were made by the score.



Mark Nichols

In one small community, typical of thousands of others, farmers in Course 5 salvaged machinery parts from scrap piles and made them over into functioning equipment. Twenty-nine sets of harrows were made to work like new. Five manure spreaders were turned out, together with many phosphate spreaders, plows, cultivators, drills, and other pieces of equipment that were rebuilt, repaired, and repainted. They had the very appearance of new machinery when they left the shop where the courses were given.

The local pastor said this program was one of the finest things that ever happened in his community. It made new machinery out of old, but more important it made new men out of the old ones. Instead of loafing at the town center during the winter months, these farmers were working together. They were learning new skills, gaining new understandings, and developing new interests, attitudes and ideals that made an improved community and helped to increase food production in the war effort.

Farm Machinery Leaders Favor FPWT Program

The Food Production War Training program has greatly increased the "mechanical quotient" (M.Q.) of American farmers. They have learned to repair their own machinery and also to build some of it. Will they continue to build it? What will farm machinery manufacturing companies say about such a practice? How can they be in favor of the farmers learning to repair their own?

The outlook for the future indicates that the farmers will not build their own machinery to any great extent. Far-

sighted leaders connected with companies manufacturing farm machinery are, however, solidly behind the Food Production War Training program and the regular program in farm machinery conducted by vocational agriculture. One leader commented in effect as follows: "We are very much in favor of the FPWT program. The farmers will not build their own machinery after the war. They will be able to buy it cheaper than they can build it, and the product will be better. The FPWT program in farm machinery is making the farmer farm-machinery conscious. He is learning to appreciate good machinery as never before. He is learning how to repair it and prolong its usefulness. Are we for this? Certainly! If a farmer is taught thru his own efforts to repair his mower to the extent of prolonging its usefulness five years, he is putting extra dollars in his pocket. Will he buy as many mowers? No, but he will put this money he has saved into other types of machinery which adds to the efficiency and labor-saving operations of his farm. Machinery is not often sold to farmers who do not know and appreciate good equipment. We are not selling machinery in those parts of the world where farmers are still plowing with a crooked stick. They do not know the value of good machinery, neither have they a great desire for it nor the money to pay for it. It takes education of the right kind to teach farmers how to select, care for, operate, and repair farm machinery and put it to correct use on the farm. Vocational agriculture is helping to supply that kind of education and we're for it."

That farmers will be able to purchase new types of machinery which will increase their farming efficiency in the future, there is no question. One company manufacturing machinery is recently reported to have demonstrated new equipment which will be on the market in the postwar period. A new item was demonstrated every 30 minutes for three days, according to the report.

SUGAR BEET LOADER CONSTRUCTED IN RWPT CLASS



One of several loaders built in Bear River High School, Garland, Utah, H. M. Skinner, instructor. This loader, in use in snow, mud and frost on November 25th, has loaded over 1,400 tons of beets this year

New and revolutionary ideas were brought forth which startled the observers.

Vocational Agriculture Must Give More Emphasis to Farm Machinery Repair

If this is the picture ahead of us, what will be the trend of the program of instruction in vocational agriculture in farm machinery? The answer is that instruction in the care, repair, and proper operation will always be in style. So will information leading to the wise selection and purchase of machinery. The economic aspects of farm machinery in terms of the whole farm picture are also deserving of attention. Mechanized farming is here to stay and to expand.

Bigger and Better Shops

The program in vocational agriculture in these respects is still in its infancy. We are now evolving from the hammer, saw, and screwdriver stage. Bigger and better farm shops properly equipped are needed in most high-school centers. Skills in connection with the wise use of the hammer, saw, and screwdriver will always be basic; but welders, hoists, lathes, machine tools, and power machinery are also shop necessities now. Increased emphasis on farm mechanics in the high-school curriculum in vocational agriculture is now a demand. Evening classes in farm machinery repair will continue to be popular. Vocational agriculture has moved into a new niche in the education of the American farmer. Courses in farm machinery repair will be an ever-increasing need. Vocational agriculture must be prepared to meet this need with the right kind of training and facilities.

Practical Farm Mechanics

BILL OLIVER, Teacher,
Kerrville, Texas

GETTING my feet on the ground when trying to sell boys on ways to make farm and ranch operation more efficient has always been one of the weakest parts of my teaching program. My association with Roy Henke, rancher, American Farmer, and Southern Region winner of the 1944 John Deere Farm Mechanics award, has placed my thinking on this subject on a more practical plane. Roy's accomplishments are splendid examples of good vocational agriculture and have definitely increased the efficiency of his home ranch. If I can sell boys on doing on their home farms and ranches the kind of work Roy has done, then I am putting over a good program of vocational agriculture in this respect.

The Henke ranch, located near Kerrville, Texas, covers 1,020 acres. There are 220 acres in cultivation planted to oats, wheat, and corn. This cultivated land is Roy's responsibility in a partnership agreement with his father. The care and management of 70 head of cattle, 400 head of sheep and 400 head of goats falls to Mr. Henke. The ranch is self-sufficient from the standpoint of livestock feed. Enough wheat is grown each year to purchase, when sold, the cottonseed meal necessary to feed with the corn and oats. Roy's mechanical interest and ability have completely mechanized the farming. The use of a tractor, multiple disk, plow, grain drill, combine, and cornpicker have cut the farming to a one-man job except during harvesttime.

The rapidity with which the work is done allows Roy time to do other work connected with the ranch and also to do custom work for neighbors with his machinery. This has meant a lot to the Henkes and to the community during these war years.

Farm Shop Essential

Roy's ability and experience, along with a well-equipped shop, have kept all the farm machinery, two cars, and a pickup in tiptop condition. His shop, which includes tools and machinery for metalwork, mechanics, and woodwork, is one of the most valuable assets on the ranch.

The introduction of rural electrification in this section gave Roy new ideas for improving the efficiency and comfort of the ranch and ranch house. The Henke family realized that the ease and enjoyment of living meant as much in life as making money. Water had always been carried from a well outside. Roy installed an electric pressure-type water system and did the plumbing work necessary to make running water available thruout the house and in all the lots and pens. Of course, an electric water heater soon followed. The house and barns were wired for lights and outside lights were placed at various points about the farmstead so that work and chores may be done before daylight and after dark, if necessary. The ranch home is now practically self-sufficient since an electric deep-freeze unit, which is always full of fine home-raised food, has been installed. When Roy brings the harvested grain in from the fields, an electric grain elevator which he constructed in his shop carries the grain to any one of four storage bins in the barn. All the feed for the highly bred Hereford cattle is ground by a hammer mill powered by the tractor.

Proper planning and refencing have divided the 800 acres of pasture land into five well-managed pastures. Four of these five pastures are so arranged that the livestock may come into the farmstead at any time. A few days' work and a small road grader have provided smooth, well-kept pasture roads to all parts of the ranch. This feature has no doubt saved expense and repair on the ranch pickup and farm machinery. The planning behind the construction and arrangement of the barns and pens is outstanding.

Yes, teaching boys to become efficient farmers and ranchers can be practical if we will deal with the practical little things that, taken together, make for total ranch efficiency.

Electric Fence Hazards

A FARMER had a homemade electric fence which had been improperly connected with a 110-volt circuit to his hen house with only a 7½-watt bulb as a resistor. Recently two of his sons were playing near the fence when the older boy dared the younger to touch it. The latter, taking the dare, was instantly "frozen" to the fence. With his other hand he grabbed a nearby steel post, forming a perfect ground. He was helpless. Fortunately his brother had enough presence of mind to run to the hen house and disconnect the current. Intermittent contact should always be used.

MANURE LOADER SAVES LABOR



Thirty farmers in classes at Bear River have constructed 30 of these loaders during the past two years. The loader will load a spreader in three and one-half minutes. One loader keeps five men and spreaders busy so that 200 loads can be spread in one day

Studies and Investigations

E. B. KNIGHT

The Use of Time by Teachers of Vocational Agriculture in Michigan

H. P. SWEANY, Teacher Education,
Michigan State College, East Lansing, Michigan

Teachers of agriculture, like other people, are putting in long days at their work during the war years. Their activities and programs are being evaluated in terms of their contribution to the war effort. Each new problem that agriculture has faced has created a new responsibility for the teacher of agriculture. Most adjustments that have been made in teachers' assignments were additions to full schedules. How have teachers been able to absorb these additional responsibilities? What means were teachers using to get their work done? What effects were these new jobs of teachers having on their regular programs?

In an effort to answer these questions and offer specific help to teachers in Michigan a research study was planned and carried out by the teacher-education staff of Michigan State College. The objectives of the study were: (1) to assemble data which might aid teachers in budgeting their time to best advantage in order to make a maximum contribution to the war effort; (2) to determine factors related to efficient use of time; (3) to find efficient teachers of agriculture, and (4) to improve the analysis of the job of the teacher of vocational agriculture. As the study was carried out more work was done on the first and fourth objectives than on the second and third.

Important Findings of Study

1. Teachers of vocational agriculture in Michigan spent on the average 58.5 hours per week at work during the school year. The range in hours by 61 different teachers was from 31 to 89 hours per week.

2. The average Michigan teacher of agriculture spent 41 hours per week on agricultural work of which 20 hours were in classes in agriculture or in a conference period. Outside of regularly scheduled hours he spent 6.4 hours in preparing for classes, 2.9 hours in making home visits, 2.2 hours in teaching or supervising adult classes, 4.7 hours in improving himself professionally, and 1.7 hours in directing activities of the local chapter of F.F.A.

3. On the average, 30 percent of the teacher's time was used for nonagricultural work. Only 8 percent of the teachers in the study devoted full time to



H. P. Sweany

agriculture. In the state as a whole only 4.7 percent of the teachers devoted full time to agriculture in 1943-1944.

4. Teachers who taught three day-school classes spent nine more hours on agricultural work than teachers who taught two day-school classes in agriculture. Conversely, teachers who taught two day-school classes in agriculture spent seven more hours per week on nonagricultural work than did teachers with three all-day classes. There was no significant difference in total hours spent at work per week.

5. Teachers teaching and/or supervising adult classes at the time data were collected were spending six more hours at work per week than those without adult classes. They actually spent 8.7 hours more per week on agricultural work than teachers without adult classes did.

6. Five teachers who were both teaching and supervising adult classes when the data were collected spent 15 hours more per week in agricultural work than teachers who were doing neither when the data were collected from them. The five teachers spent 17.2 hours more in total work per week than those teachers without adult programs.

7. On the average, 1.6 students were supervised on the farm during the week studied. Based on the average number of students enrolled (36 in day classes), probably less than an average of two home visits per student were made during the school year.

8. Teachers using five or more hours for home visits spent as many hours per week on the remainder of their program as those who made no home visits during the week spent at work.

Sources of Data

The data for this study were collected by the teacher-education staff in connection with their regular field service in 1943-44. Teachers' regular schedules were used in part and, in addition, teachers recalled for the interviewer what they had done during the previous seven days. The method of recording data during the interview helped to insure that all kinds of work were recalled by the teacher. In 1942-43 data were collected from 26 teachers by the means mentioned above. In addition, they kept a day-to-day record for the ensuing seven days. The averages of the two weeks were so similar that the second week's report was discontinued in 1943-44. If there were errors in the data it was assumed that they would be in the direction of underestimating the actual time used for the activity.

The Use of Time by the Teacher of Agriculture

Sixty-one of Michigan's 203 teachers of agriculture spent on the average 58.5 hours per week at work during the year. This is an average of the number of hours used by different teachers during a single week sometime during the school year. It does not include the summer months. During the school week 28.7 hours were used for classes, conference periods, or study halls. The teacher of agriculture spent 29.8 hours each week in work outside of regular day-school hours.

Not all teachers spent 58.5 hours on the job; others could not finish their work in that time. One teacher worked as few as 31 hours in the week; another as many as 89 hours. Twenty-five percent of the teachers used 65 or more hours for their work; only 16 percent worked less than 50 hours during the week sampled.

The different types of work that teachers performed did not vary greatly, altho the amounts of time devoted to each did. The amounts of time devoted to the different activities by a single teacher would probably vary almost as much from week to week as the amounts of time varied between teachers who were sampled at different times of the year. The average amount of time per week of all teachers would more nearly represent the average amount of time that an individual teacher would spend than his one week's sampling did. However, it will be shown that variations in program did affect the amount of time used. Those teachers with larger total programs would be expected to use more than the average amount of time for all teachers. This is supported by the data altho noticeable exceptions occur.

Teachers whose work week was sampled in the winter (December, January, and February), on the average, spent 3.4 hours more per week than those teachers from whom data were secured in the fall and 5.9 hours more than those teachers interviewed in the spring group. The difference between the average amount of time spent by teachers in the spring and winter is found mainly in a smaller amount of time being used for lesson preparation, for professional improvement, and for miscellaneous agricultural work.

Hours Devoted to Agricultural Work

On the average, 41 hours per week were used by teachers for agricultural work. This represents approximately 70 percent of their working time. Twenty hours per week were used for scheduled agricultural classes or conference periods during the school day. The remainder of the time was used as follows: 6.4 hours for class preparation, 4.7 hours for professional improvement, 2.9 hours for home visits, 2.2 hours for adult classes, 1.7 hours for F.F.A. work and 3.2 hours for miscellaneous agricultural work.

Five full-time teachers averaged 59.3 hours on agricultural work. This is slightly more time than all teachers averaged at work. They had either three or four day-school classes; they spent 11 hours preparing for their day-school and adult classes. Four of the five had adult classes going when the data were collected.

There was more variation in the hours devoted to agricultural work by teachers than there was in hours devoted to total work. In this study there was a range of from 22 to 71 hours for agricultural work per week. Some of the differences are explained by the number of day-school classes offered in the curriculum. There were wide variations in time spent on the different activities outside of the school schedule, such as lesson preparations, adult education classes, home visits, professional improvement and the F.F.A. As a rule a larger number of hours is associated with larger numbers of students, with larger supervised farming programs, and with larger adult programs.

Teachers, on the average, spent more hours in agricultural work during the winter months (December, January, and February) than they did in either the spring or the fall. The hours of work in winter were 5.6 more than those in the spring and 4.1 more than those in the fall. These differences, however, are not statistically significant.

Time Spent on Nonagricultural Work

Thirty percent of the teachers' time was given to nonagricultural work. Eight percent of the 61 teachers were reported as devoting full time to agriculture during the school year. Only 4.7 percent of all teachers of vocational agriculture in Michigan in 1943-44 were employed full time for agriculture. Even those teachers who were considered full-time teachers of vocational agriculture spent 8 percent of their time on work that was not agricultural, such as routine school duties.

There was considerable variation in the activities included in nonagricultural work. Four teachers were used for driving a school bus, seven for coaching, and 12 were employed either as superintendent or principal. Driving school busses required on the average 9.6 hours per week; coaching 3.1 hours per week, and administrative duties 7.1 hours. Those teachers with administrative responsibilities averaged 9.1 hours less per week on agricultural work than teachers without these responsibilities did. These administrative duties had approximately the same effect on the amount of agricultural work than an additional academic class does.

Adult Education Is Overtime Work

In general, it may be said that any increases in the day-school program in agricultural work are accompanied by decreases in nonagricultural work. This is not true when the adult program is studied. It has been common practice in Michigan to reimburse schools on separate contract for adult classes taught. In such cases teachers are assigned a full-time day schedule with the adult classes being overtime. This was not a serious problem when only one adult class was taught, but since the special appropriations for adult education have been

TABLE I
The Number of Home Visits to Day-School Pupils Made During One Week
by Teachers in Various Sized Departments

Size of department	Number of home visits per week						
	0	1	2	3	4	5	6
less than 25 pupils		3	2	1			
25-34 "	10	5	5	2	2	1	1
35-44 "	6	3	1	2	1	1	1
45-54 "	3	3		2		2	
55 or more "	2			1		1	
Total number of teachers by number of visits	21	14	8	8	3	5	2

available, the load on teachers has increased.

Few Supervisory Visits Made

The 61 teachers made on the average 1.6 visits to day-school pupils during the school year. In Table I it can be seen that 21, or more than one-third of the teachers, did not visit any student during the week sampled; approximately one-sixth of the teachers visited four or more in the week. The average number of students enrolled in all departments was 36. It can be easily seen that students, on the average, probably did not receive two visits during the school year. Teachers with larger enrollments in classes visited slightly more students per week but they made fewer visits per pupil than teachers with smaller enrollments. For example, in Table I it is shown that four teachers had enrollments of 55 or more students. Two teachers made no visits, one teacher made three visits and the fourth made five. These teachers averaged two visits per week but only about one boy in 30 would receive a visit. In departments with fewer than 25 pupils on the average, about one boy in 14 would receive a visit.

In terms of hours 2.9 hours were used for home visits. One hour was used in visiting adults and 1.9 hours in visiting day-school pupils. On the average, $1\frac{1}{4}$ hours were used for each visit.

The average number of visits per week did not vary greatly between months. The number of visits was lowest in January when an average of 1.3 visits were made; the greatest number was in April when an average of 2.1 visits were made. The length of time per visit was greatest in December when approximately $1\frac{1}{2}$ hours were used.

The 10 teachers who visited four or more day-school students per week would require eight weeks to visit their students. The data on home visits from these teachers were analyzed further. All 10 visited some students on Saturday; nine of the 10 visited on other days of the week, too. More visits were made on Tuesday than any other day except Saturday, altho some one of the 10 teachers made visits on every day of the week.

Eighteen of the 61 teachers spent more than five hours per week in home visits. Twelve of these teachers visited both day-school students and adults; two visited adults only and four visited day-school pupils only. These 18 were compared with 13 who visited neither day-school students nor adults during the week sampled. Those who made visits used 6.6 hours for them.

Suggestions for Use of Time

The following suggestions for teachers have grown out of the study:

I—Planning the Total Program of the Department of Vocational Agriculture

1. Utilize the services of an advisory council to review plans for the agricultural education program.
2. Increase the program for adult education to meet the needs of farmers and their wives.
3. Plan to utilize individuals and community resources in carrying out the program of agricultural education in the community.
4. Analyze the teacher's activities to uncover those activities which are not receiving sufficient attention to do the work satisfactorily, and to discover those time-consuming activities which are not essential to a strong department of vocational agriculture.
5. Study the different jobs that pile up in one season to see what ones may be distributed to seasons when the work is lighter.
6. Enter all records on proper forms as soon as they are completed in order to decrease the amount of work when records must be submitted to the State Office.
7. Plan a definite schedule, in co-operation with the superintendent and principal, for the extra-curricular duties of the teacher of agriculture in order to prevent conflicts with other school duties.
8. Remain long enough in the school to teach with a high degree of efficiency, rather than move to another school.

II—Supervising Farming Programs

1. Schedule some home visits during or after school as well as on Saturday in order to provide adequate supervision for farming programs.
2. Explore the possibilities for group supervision by means of tours and by teaching abilities to several boys needing to learn on one boy's farm.
3. Increase the number of field trips conducted which have as their objective the development of abilities students will need to learn and use in their individual farming programs.
4. Make home visits when critical problems are about to be faced by the student.
5. Improve the economy of visits by scheduling to see as many individuals on one trip as can be justified from the standpoint of need and of time.

(Continued on page 197)

Future Farmers of America

A. W. TENNEY

The Master Chapter Plan

GEORGE P. COUPER, Assistant to the Chief,
Polytechnic Institute, San Luis Obispo, Calif.

EVERY state has one or a number of Future Farmer chapters to which it likes to point with pride. These chapters always have many outstanding accomplishments and activities. They conduct well-rounded programs. Other chapters in the state may be more lopsided; just specialize in one or two worthwhile activities; and a few just don't seem to accomplish much of anything.

Various means have been tried to upgrade the mediocre chapters, including chapter contests, programs of work, and other devices. California this year is trying out a "Master Chapter" plan, and is prepared to give each chapter a handsome certificate if it qualifies as a "Master Chapter."

Each requirement was taken up and discussed by delegates at the state convention and the 14 qualifying activities or accomplishments were adopted unanimously. Thus far, the plan has shown definite evidence of upgrading, in that chapters have indicated that they have added worthwhile activities this year in order to qualify.

The 14 objectives are those which any chapter, large or small, can readily meet.

At the end of the year, on a simple one-page report form, we ask, "Did you, or did you not, accomplish the following?":

1. Get organized and elect officers the first month of school or before.
2. Prepare a program of work.
3. Observe National Future Farmer Day (October 10, 1944).
4. Pay up 75 percent of the enrollment in F.F.A. dues by December 1.
5. Participate in the Sixth War Loan Drive.
6. Have a dinner for parents, dads, mothers, or a similar group.
7. Have an organized visit to F.F.A. home farming enterprises.
8. Prepare an application for at least one State Farmer candidate.
9. Prepare at least one story for the local newspaper on the progress of the chapter.
10. Have a departmental "open-house" or similar function at the high school.
11. Conduct some co-operative venture involving chapter-owned assets.
12. Send a delegate to the state convention.
13. Conduct some recognized community service.
14. Send an article or item to the state magazine at least every two months during the school year.

Some criticism may be directed at



G. P. Couper

these objectives. Where is the home farming program? Well, the answers to the above are "Yes" or "No." To be a Master Chapter, the answers must be 14, in the affirmative—not how well they did it, but *did* they do it. A chapter that did not have home farming programs would be automatically out under the provisions of the Smith-Hughes law. In short, we assume home farming enterprises in addition to the 14 qualifying provisions.

On December 1, the list of eligible chapters took a hearty bump. Some 48 chapters had not paid dues. Sure, the boys had the money. Generally they had turned in dues locally or authorized the payment from bulging chapter treasuries. But somebody—the adviser or treasurer—hadn't remitted them to the state office.

About the first of March another chunk will be carved off by eliminating those chapters which fail to submit even one State Farmer application. And by the end of the year, others will be found which did not have a program of work, or did not operate a co-operative enterprise, or did not participate in National Future Farmer Day.

The plan is to continue this over a period of years. The certificate states that the chapter is designated as a "Master Chapter" for the "year or years indicated below." Printed strips bearing the years 1944-45, 1945-46, and so on, will be made up by the state office and dis-

tributed each year to be affixed to the certificates. If a chapter "misses" a year, the next winning year will be pasted in right after the last previous winning—there will be no "blanks."

The idea is not new. Other states have tried it, and some no doubt are continuing some plan of this sort. At its inception it met fairly unanimous approval on the part of chapter advisers. We have evidence that it is doing some good. One adviser of a chapter not previously high in accomplishment said enthusiastically, "Now *here's* something we can get out teeth into."

Altho progress in general is evident, I sadly report that this particular chapter did not have its dues in by December 1.

A skit demonstrating parliamentary procedure was prepared by our F.F.A. officers and presented to the high-school assembly and a ladies' club.—Stanton, Nebr.

This year, twice each month, the F.F.A. officers and the F.F.A. adviser have noon lunch together. This 55-minute period gives us time to discuss many F.F.A. problems and activities.—Norfolk, Nebr.

This year we held our F.F.A. parliamentary procedure contest in the high-school assembly room. The entire high school were our guests.—DeWitt, Nebr.

The day of the F.F.A. freshman initiation, each new member coming into the Chapter wore a small green hand on his coat, and a red handkerchief around his neck.—Nebraska City, Nebr.



A. I. Edwards, teacher of vocational agriculture of Burkett, Texas, helping Tommie Connelly, left, Scott Henderson, district president, center, and Roy Dean Young, chapter president, right, with their records preparatory to applying for the State Farmer Degree. Scott was chosen the outstanding State Farmer of Central West Texas and received a cash award of \$238.15 with his State Farmer key. (What are good project records?—The Editor)

Our Leadership in Agricultural Education



Dr. E. W. Garris



R. J. Peeler



R. E. Cammack



C. O. Ayres

DR. E. W. GARRIS has been teacher-trainer in the University of Florida since 1927. His educational experience includes the B.S. degree from Clemson College, M.A. degree from the University of South Carolina, Ph.D. degree from Peabody College, and doctor of science from Clemson College. Previous to his teaching vocational agriculture he was a high-school principal. He served as assistant state supervisor in South Carolina for four years and state supervisor in Florida for two years prior to his appointment to his present position. He is the author of textbooks on crop and horticultural enterprises and contributions in the field of methods.

Mr. R. J. Peeler is on the supervisory staff in North Carolina. He took both his bachelor's and master's degrees at North Carolina State and has taught vocational agriculture in that state for 12 years. For the past six years he has been an assistant supervisor with special responsibilities pertaining to the Future Farmer program. He provides copy liberally for our magazine and promotes the program in the state vigorously and effectively.

Robert E. Cammack directs the program of supervision in Alabama. Graduating from Alabama Polytechnic in 1916, he spent one year in one of the district agricultural schools of the state and one year as county agent prior to his three years of service in vocational teaching in a county agricultural school. He completed his master's degree at Cornell University in 1927. He has held several positions related to Federal and state projects. A more nearly complete "obituary" may be found in "Who's Who" where Mr. Cammack is one of the two representatives of our state supervisors.

Mr. C. O. Ayres of Minneapolis is one of our newer supervisors, being appointed last August. Farm-reared in Minnesota, he graduated from the College of Agriculture in 1929 and received his master's degree from the University of Minnesota in 1941. He taught vocational agriculture in Minnesota for 13 years when his success in that field led to his appointment as assistant supervisor in 1942. He took over the FPWT program for one year after which he was appointed state supervisor of agricultural education.

Supervision That Works

(Continued from page 184)

agricultural activities in the numerous communities under his supervision, the attitude of school superintendents toward our work is largely affected by his actions. He is the bearings that make the wheel roll smoothly—the shock absorber that makes the ride on rough roads smoother.

If I am making the supervisor's task seem unsurmountable, let me offer about six suggestions. First is the power of *suggestion*. The best supervisors rarely give orders. Instead of demanding, they are more inclined to say, "Wouldn't it be a good thing if we did this?" Or, "As I see it there are two or three ways of tackling this. Which, in your opinion, is the best?" This is not a trick but a sincere effort to give the man who shares responsibility the chance to partake in its direction.

The second suggestion is *confidence*. During times like these, people are drawn closer together. An intimate and more informal relationship grows. A supervisor should make the most of this growing confidence and make it easy for teachers and superintendents to approach him on any matter.

The third suggestion is *policy*. When a supervisor speaks, it is taken for granted that he speaks for the vocational agriculture service. He should be constantly aware that he is the director of public

relations for the service.

The fourth suggestion is to be *constructive*. It is easy to criticize, but to offer something better is often difficult. A supervisor should keep this in mind and commend outwardly—but reprimand with silence.

The fifth suggestion is *self-control*. It is evident that statements made upon impulse, in irritation, or in anger are not the expressions upon which any service can found a sound policy. Frequently supervisors find it necessary to plan conversations when they are dealing with delicate and difficult subjects. It is well for the supervisor to have clearly in mind exactly what attitude and temper of mind he wishes his listener to be in when the talk is concluded.

The sixth suggestion is to *refrain from gossip*. It is a good rule for a supervisor never to say about a person anything that he would not say to him. To bridle one's comment when speaking of another is never quite so easy as when speaking to that person, but few efforts at self-discipline yield so great a return.

If I seemingly expect supervisors to be superhuman, I am merely endeavoring to impress upon us all the far-reaching effects of our work. If we can ever be conscious of this fact, I believe we will practice self-analysis and will use this section in doing so. We will help the farm people in a better way of life thru a well balanced program of agricultural education.

The Use of Time

(Continued from page 195)

6. Study problems of production and management in class which students will encounter in their farming programs so that they can make intelligent decisions and follow approved methods of procedure in carrying out the farming program.

7. Help the student to plan the time when he will need the services of the teacher in carrying out his farming program, and schedule visits in light of these plans.

8. Keep an adequate record of home visits to determine the students who have not had adequate supervision.

9. Develop farming programs thru summer contacts so they can be started early in the school year.

10. Notify students regarding the date of visit in order to insure their presence when a call is made.

III—Planning the Instructional Program

1. Utilize the summer period for revision of course outlines for day-school classes.

2. Plan outlines for adult and part-time classes during the summer and order needed materials.

3. Secure teaching materials during the summer and preserve them for use during the school year.

4. Utilize the secretarial help of the school in the preparation of charts.

5. Organize files simply so that both students and teacher can use them quickly and completely.

6. Use students in preparing materials on charts which have instructional value at the time and later may be used as teaching aids.

7. Utilize the conference period and home visits for providing adequately for individual differences of students.

8. Encourage pupils to participate in formulating detailed plans for study after adequate preparation has been made by the teacher for this activity.

9. Enroll in graduate classes or workshops to secure materials or make plans for classes to be taught in the community.

IV—Keeping Records and Reports

1. Encourage students to keep records in the file up to date by periodically providing time for this purpose.

2. Complete records of projects as soon as project is finished and record the data required on the proper blanks.

3. Make class and school summaries of projects in class periods and use them for instructional purposes.

4. Utilize secretarial help and office equipment for making out reports.

5. Keep adequate records of the teacher's activities outside of the school day so that the administration, teachers, and community may know the responsibilities of the teacher of agriculture.

V—Delegating Responsibilities to Students

1. Assign housekeeping responsibilities to all students so that routine duties about the classroom and laboratories are dispatched quickly.

2. Elect a student manager for the Junior D.H.I.A. and other comparable student activities.

3. Develop student initiative and responsibility thru the F.F.A. program of work.

Across the Editor's Desk

UNDoubtedly there will be many more contributors to the magazine this year than last. The majority of these will be "first-timers." To reduce the chore duties of the editors, a few suggestions are given dealing with preparation of copy.

First, in the field of elementary items, is the agreement of the editor and the professional staff of the Meredith Company to use periods following each letter in the abbreviation, F.F.A., but, when referring to the various government agencies, to omit the periods; for example, FPWT.

Next, remember that "agriculture" is *never* an adjective. Not "agriculture teacher" but "teacher of agriculture"; not "agriculture education" but "agricultural education."

Third, rarely use two long adjectives modifying a noun, never use more than two but, rather, swing one of them into a prepositional phrase and see how much more smoothly the copy reads. Not "vocational agriculture teacher" but "teacher of vocational agriculture"; not "vocational agricultural education classes" but "classes in vocational education in agriculture"; not, as copy was submitted recently, "from these co-operative part-time vocational agriculture and home economics groups" but swing it into phrases and feel it glide, such as "from these co-operative groups in part-time education in vocational agriculture and vocational home economics."

In brief, just observe the common, everyday usage of good English.

Punctuation is more difficult and, as I critically read articles in good journals, I find lack of agreement among good writers. May I suggest, therefore, that, since "punctuation is used basically to make clear the thought to the reader," you be guided by that rule.

May I suggest again that, if you are not sure of your English, you ask the assistance of a competent critic from among your acquaintances. It will help the special editors so much and also the editor.

A word about the length of articles. It seems sound to request for our small magazine, serving so many areas of service, no articles exceeding two pages in length. Even then they must be good or the supply of copy must be short to be approved. Think, rather, how much you can say in one page if you will really express yourself concisely and directly. More than that, much can be written in a column or a half-column. Some of the best contributions have been less than one column. Let's have more of them. *Good pictures* are always acceptable.

What is wanted from the teachers? Those ideas which have brought good results for you and which, in your judgment, would be appreciated by other teachers. A similar rule might guide all writers. May I have more and better copy? Enough so that some can be refused and, thereby, the quality of the magazine improved? A personal invitation to you.

The time schedule of the magazine follows: Copy leaves the editor's desk about the 26th of the month so your articles should be in by the 15th. Proof is received about the 12th of the month and page proof about the first so that mailing is done about the 20th.

How to Write Bulletins

JOHN TURNIPSEED

THE trouble with you, says the county agent to me the other day, is that you read too much sport news and not enough bulletins.

That ain't my fault, I says. If them there professors would git some of them baseball writers to write their bulletins for 'em they wouldn't have to give 'em away and git Congress to mail 'em free in order to git folks to read 'em.

Another trouble with them bulletins is that they ain't got no sex appeal, so how can you expect 'em to be best sellers. Here's one that come the other day, for instance, that's about white and yellow corn for brood sows. Here's what it says about them sows:

"Eight sows that had been raised on well balanced rations were selected for this experiment and were divided into groups of four each. Each group contained one sow of each of the following four breeds: Duroc Jersey, Poland China, Hampshire and Chester White."

What is there about that to make you sit up nights to find out how it came out?

If I was writin' that there bulletin, I'd start it something like this:

"The eight sows in this experiment was trim like flappers with a come-hither look in their eyes. Two of 'em was red headed, two was blonde, and two was brunettes. The other two was harder to classify, bein' the light haired, black-eyed kind that does the most damage of all."

Then there's another bulletin on feedin' soybean and sweet clover hay to draft fillies. Here's what it says:

"The development made by these fillies was very satisfactory. The purpose in feeding was not to make satisfactory gains but to grow the fillies out well, keeping them sound in their joints if possible and in thrifty growing condition. Several of them should grow into ton mares."

There ain't nothin' in that to make the hired man read it instead of the Red Book, is there?

Here's the way that bulletin ought to start out if you want folks to read it:

"The way them fillies developed sure would have surprised their grandmothers. They weren't fed heavy, on account they was havin' such a good time they didn't have much time to eat, much less to sleep, and anyway, we wanted to keep 'em trim in the ankles and sound in the knees. Speakin' of knees, you might look a long time and do worse. Of course, you never can tell what will happen, and in spite of the best we could do it looks as if some of them fillies would develop into ton mares. If they would eat less candy and more pickles and take reducin' exercises!"

Or you might write a bulletin on dairy cows something like this:

"Pieterje Johannes knocked a home run right into the milk pail when she made 69 pounds of butterfat in 30 days. The old cream separator on third base busted a cog trying to git the ball, but Pieterje Johannes slid home safe and won the game for the DeKalb Testing Association in spite of the other side knockin' out the umpire with a Babcock tester."

That's the way them there bulletins ought to be written.

They wouldn't be scientific, says the county agent.

Mebbe not, I says, but they'd be read.

The Fellowship of Books

I care not who the man may be,
Nor how his tasks may fret him,
Nor where he fares, nor how his cares
And troubles may beset him,
If books have won the love of him,
Whatever fortune hands him,
He'll always own, when he's alone,
A friend who understands him.

Though other friends may come and go,
And some may stoop to treason,
His books remain, through loss or gain,
And season after season
The faithful friends for every mood,
His joy and sorrow sharing,
For old time's sake, they'll lighter make
The burdens he is bearing.

Oh, he has counsel at his side,
And wisdom for his duty,
And laughter gay for hours of play,
And tenderness and beauty,
And fellowship divinely rare,
True friends who never doubt him,
Unchanging love, and God above,
Who keeps good books about him.

—Edgar A. Guest

BANQUET BANTER

Toastmaster: Very genuine pleasure for me to have privilege of inviting my father to make response to Frank's address of welcome this evening. Am sure all us boys agree with Frank that co-operation of parents is of great value in determining our success in farming programs. Before presenting Father I am going to take chance by giving you incident or two that happened in our home. One Sunday afternoon Father was reading and apparently had just read something about marvels of science. He spoke up something like this, "My, what marvelous things are being done today in world of science! It all combines to make one realize just how insignificant man is." At that, Mother, apparently recalling that Father had turned down recent request for new hat or something, commented not entirely under her breath something like this, "Yes, but you get about same effect by marrying one." That held Father for afternoon. Shortly after that, we were driving along in car and Mother made some comment about Father's driving. I guess it must have peeved him; anyway he drove up to filling station and asked station attendant if he had any antiknock gasoline. He replied he had a little. Father said, "Fill up the Missus there in back seat." Ladies and gentlemen, my father.

Speaker: This is pretty fast company for me to have privilege of inviting my school I was so busy trying to memorize lot of useless facts that had little time for occasions like this; social evening tonight, athletic contest tomorrow night, and maybe concert before another week. It's all very wonderful. Speaking along the same line as Charles introduced me, I find the following lines just about express my thoughts:

"Before I married Maggie dear,
I was her pumpkin pie,
Her precious peach, her honey lamb,
The apple of her eye.
But after years of married life
This thought I pause to utter
Those fancy names are gone, and now,
I'm just her bread and butter."

